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Patent

Attorney's Docket No. 004501-530

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In re Patent Application of	)	
Joachim BERTSCH, <i>et al.</i>	)	Group Art Unit: 2857
Application No.: 09/800,570	)	Examiner: Paul L. KIM
Filed: 08 March 2001	)	Confirmation No.: 5371
For: METHOD AND DEVICE FOR	)	
ASSESSING THE STABILITY OF	)	
AN ELECTRIC POWER	)	
TRANSMISSION NETWORK	)	

**REQUEST FOR RECONSIDERATION**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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Sir:

In response to the Office Action mailed 29 January 2003, Applicants respectfully request reconsideration.

Claims 1-9 are pending in the application.

***Acknowledgment of Certified Copy of Priority Document***

The Office Action Summary mailed 14 August 2002, does not acknowledge receipt of the Certified Copy of the Priority Document that was filed on 08 March 2001 with the application.

Applicants respectfully request written acknowledgment that the U.S. Patent and Trademark Office received the Certified Copy of the Priority Document.

***Claim Rejection - 35 U.S.C. § 102(b)***

In the Office Action, the Examiner rejects Claims 1-5, 7 and 9 under 35 U.S.C. § 102(b) over U.S. Patent No. 5,428,549 to Chen (Chen). This rejection is respectfully traversed.

Chen discloses a fault location system having a protective relay at a known location along the conductors. See for example Chen at Column 4, Line 32 (C4/L32). Chen teaches that the phase current and voltage samples are preferably obtained at the known location where the protective relay is located. See, *e.g.*, Chen at C5/L24. These samples,  $I_{ry}$  and  $V_{ry}$ , are subsequently processed in order to determine the relay-to-fault distance  $M$ . See, *e.g.*, Chen at C7/L26-47. The network being investigated is reduced or represented in a very basic form, as shown for example in Figure 3 of Chen, and does not appear to account for or acknowledge any switches whose state would be communicated to a center.

Furthermore, the objective of Chen's disclosed system is to locate the position of a fault only *after* the occurrence of the fault, and provide a fault resistance parameter and an indication of the type of the fault. See, *e.g.*, Chen at C4/L47-48; C5/L20-22; and C6/L31-32.

Accordingly, Chen fails to disclose or suggest the actions of c) transmitting information regarding the state of switches of at least one substation to the system protection center, and d) the system protection center determining at least one stability margin value of the transmission network from said phasor data and said information regarding the state of switches, as recited in Claim 1. In particular, the location in Chen cited by the Examiner, C5/L42+, relates to appropriately choosing the relay current  $I_{ry}$  and

voltage  $V_{riy}$  in a three-phase system. However, this fails to disclose or suggest transmitting information regarding the state of switches of at least one substation, and likewise fails to disclose or suggest determining at least one stability margin value. The stability margin value can indicate, for example, how much more power may be drawn by a substation or transferred through a tie line before the network collapses. See, *e.g.*, the present application at page 9, lines 13-14 (P9/L13-14); P10/L9-10; and P8/L10-21. Chen fails to disclose or suggest such a stability margin value, and therefore also fails to disclose or suggest Claim 7.

For at least the above reasons, Applicants respectfully submit that Chen fails to disclose or suggest all of the features of Claims 1 and 7, and likewise of dependent Claims 2-5 and 9. Withdrawal of the rejection of Claims 1-5, 7 and 9 under 35 U.S.C. § 102(b) over Chen is respectfully requested.

***Claim Rejections - 35 U.S.C. § 103(a)***

***Claim 6 - Chen & U.S. Patent No. 6,313,752 to Corrigan***

In the Office Action, the Examiner rejects Claim 6 under 35 U.S.C. § 103(a) over Chen in view of U.S. Patent No. 6,313,752 to Corrigan (Corrigan). This rejection is respectfully traversed.

Corrigan fails to overcome the deficiencies of Chen discussed above with respect to allowable Claim 1. Claim 6 depends from Claim 1, and is therefore likewise allowable for at least the same reasons. Withdrawal of the rejection of Claim 6 under 35 U.S.C. § 103(a) over Chen and Corrigan is respectfully requested.

***Claim 8 - Chen & U.S. Patent No. 5,272,462 to Teyssandier***

In the Office Action, the Examiner rejects Claim 8 under 35 U.S.C. § 103(a) over Chen in view of U.S. Patent No. 5,272,462 to Teyssandier, *et al.* (Teyssandier). This rejection is respectfully traversed.


Teyssandier fails to overcome the deficiencies of Chen discussed above with respect to allowable Claim 1. Claim 8 depends from Claim 1, and is therefore likewise allowable for at least the same reasons. Withdrawal of the rejection of Claim 8 under 35 U.S.C. § 103(a) over Chen and Teyssandier is respectfully requested.

***Conclusion***

For at least the reasons set forth above, Applicants respectfully submit that the application is in condition for allowance. Favorable consideration on the merits and prompt allowance are respectfully requested. In the event any questions arise regarding this communication or the application in general, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By:   
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Date: 28 July 2003



2857  
Patent

Attorney's Docket No. 004501-530

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of )  
Joachim BERTSCH et al. ) Group Art Unit: 2857  
Application No.: 09/800,570 ) Examiner: Paul L. KIM  
Filed: 08 March 2001 ) Confirmation No.: 5371  
For: METHOD AND DEVICE FOR )  
ASSESSING THE STABILITY OF AN )  
ELECTRIC POWER TRANSMISSION )  
NETWORK )

**AMENDMENT/REPLY TRANSMITTAL LETTER**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Enclosed is a reply for the above-identified patent application.

- ☒ A Petition for Extension of Time is also enclosed.
- ☐ A Terminal Disclaimer and the ☐ \$55.00 (2814) ☐ \$110.00 (1814) fee due under 37 C.F.R. § 1.20(d) are also enclosed.
- ☐ Also enclosed is/are \_\_\_\_\_.
- ☐ Small entity status is hereby claimed.
- ☐ Applicant(s) requests continued examination under 37 C.F.R. § 1.114 and enclose the ☐ \$375.00 (2801) ☐ \$750.00 (1801) fee due under 37 C.F.R. § 1.17(e).
- ☐ Applicant(s) requests that any previously unentered after final amendments not be entered. Continued examination is requested based on the enclosed documents identified above.
- ☐ Applicant(s) previously submitted \_\_\_, on \_\_\_, for which continued examination is requested.
- ☐ Applicant(s) requests suspension of action by the Office until at least \_\_\_, which does not exceed three months from the filing of this RCE, in accordance with 37 C.F.R. § 1.103(c). The required fee under 37 C.F.R. § 1.17(i) is enclosed.

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- ☐ A Request for Entry and Consideration of Submission under 37 C.F.R. § 1.129(a) (1809/2809) is also enclosed.
- ☒ No additional claim fee is required.
- ☐ An additional claim fee is required, and is calculated as shown below:

A M E N D E D   C L A I M S					
	No. OF CLAIMS	HIGHEST NO. OF CLAIMS PREVIOUSLY PAID FOR	EXTRA CLAIMS	RATE	ADD'L FEE
Total Claims		MINUS =		× \$18.00 (1202) =	
Independent Claims		MINUS =		× \$84.00 (1201) =	
If Amendment adds multiple dependent claims, add \$280.00 (1203)					
Total Claim Amendment Fee					
If small entity status is claimed, subtract 50% of Total Claim Amendment Fee					
<b>TOTAL ADDITIONAL CLAIM FEE DUE FOR THIS AMENDMENT</b>					


- ☐ A total fee in the amount of \$ \_\_\_\_\_ is enclosed.
- ☐ Charge \$ \_\_\_\_\_ to Deposit Account No. 02-4800.

The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17, 1.20(d) and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: 28 July 2003

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